

**Notes for Staff Presentation**

1. **What is the Flipped Classroom**

<http://www.slideshare.net/knewton/the-flipped-classroom>

1. **What I tried** -
   1. Note to parents
   2. Explained to girls
   3. Grid printed and emailed to class
   4. One week where students tried it.
2. **Pros** 
   1. Some girls obviously did the work fully and then came straight into class
   2. Some liked rewatching a range of videos -
   3. More time to engage with girls and really check how they were going
3. **Cons**
   1. Only did it for a week – will need to persevere to help them gain confidence
   2. Girls who didn’t do HW
   3. Long lessons – ideally we would then do some deeper application and group work.
4. **Evaluation –** 
   1. Not formal – although a multiple choice in class quiz was well attempted.
   2. Final exam results 3 weeks later , harder to gauge – they weren’t noticeably better
   3. Student feedback on Edmodo
5. **Things to consider for next time** 
   1. Have now set up Edmodo to try and gain feedback PRIOR to class for evaluation
   2. Clearly set up program for students with Internet issues at home
   3. May insist on written notes and examples
   4. Do we make our own video clips?
   5. 90 minute periods make it interesting – do they go and watch new content during class??
   6. Sebastian and I are going to try it again with a small unit for Year 9 Maths – perhaps Solving Equations

**Five things I wish I knew When I Flipped my Classroom**

<http://www.youtube.com/watch?v=4JPdGlyt6gg&feature=player_detailpage>

24th February 2013

Dear Parents/Guardians

As part of our teaching and learning at the school we are always trying to look at new ways of engaging our girls in their learning, especially of Mathematics. For part of this unit on **Indices** I will be trialing a method of learning- **The flipped classroom** -with my class that seems to be having very positive results in other schools and areas of study. I have included a small amount of information below for you to read.

This method requires the girls to look at several resources and examples for homework and record questions they may have. I may set up a Google Document that they can use to ask me questions or alert me to the “problem areas” before they get to class.

**I ask you to assist me by signing off on their homework each night on the sheet attached.**

This is an initial trial for about 5-7 days. I will then ask the girls for any feedback. Please feel free to contact me should you wish to add any observations, positive or negative, or if you have any other matters you wish to discuss regarding your daughter’s Mathematics.

Kind regards

Rosemary Burton

([rburton@scholastica.nsw.edu.au](mailto:rburton@scholastica.nsw.edu.au))

The flipped classroom

Page Content

Flip or reverse teaching is an instructional approach that uses the power of technologies to support focused and extended student learning. In the approach developed by American teacher, Karl Fish, teachers 'teach' at night and students do 'homework' during the day.1

In the evening, flip teaching involves students in reading, watching, pausing and replaying video tutorials prepared by the teacher to develop a basic understanding of key learning concepts. They then come to class where they can consolidate, apply and extend their new learning through group discussion, problem solving or experimenting with the concepts they have been introduced to. Essentially, what was traditionally completed at home as homework has been flipped to become the focus of classroom learning.

Using this strategy allows classroom instructional time to be focused and targeted to students' needs and prior knowledge. In the flipped classroom, teachers adopt the role of coach while students are provided with increased opportunities to engage in extended and deep learning. This strategy supports assessment for learning as teachers can effectively identify and respond to student levels of readiness.

[Classroom Connections](https://classroomconnections.eq.edu.au/Pages/default.aspx)>[Topics](https://classroomconnections.eq.edu.au/topics/Pages/default.aspx)>The flipped classroom:

Queensland Government- Department of Education, Training and Employment.[ Accessed 24 Feb 2013 <https://classroomconnections.eq.edu.au/topics/Pages/2012/november/flipped-classroom.aspx>

If you are interested the following TED talk is worth watching.

TED talks :**Salman Khan: Let's use video to reinvent education**

<http://www.youtube.com/watch?v=nTFEUsudhfs&feature=player>

OR

**Flipping the Classroom**- Tech & Learning:Ideas and Tools for Ed Tech Teachers [Accessed 24th Feb 2013]

<http://www.techlearning.com/features/0039/flipping-the-classroom/52462>

**INDICES :** BASIC

|  |  |  |
| --- | --- | --- |
| **Content** | **Resource to watch** | **Parent signature** |
| **Index Notation** | **Indices-Introducation:ExamSolutions**  <https://www.youtube.com/watch?v=r_No-gMg6Fc>  **Index notation(1).mp4**  <https://www.youtube.com/watch?v=ncMsVv-gml8>   * Read Booklet page 2 * Textbook pages 259-260 |  |
| I need to find out about…………. | NOTES |  |
| **Multiplication with Indices** | **Math Help Index Laws - Rules of Multiplication**  <https://www.youtube.com/watch?v=i5B1Ok1CrC0>  **Indices:Multiplication Rule:ExamSolutions**  <https://www.youtube.com/watch?v=d1Wudo32XAo>   * Read Booklet page 3 * Textbook pages 262 |  |
| I need to find out about…………. | NOTES |  |
| **Division with Indices** | **Indices - Division Rule 1 : ExamSolutions**  <https://www.youtube.com/watch?v=nDYm30FYc5k>   * Read Booklet page 3 * Textbook pages 264 |  |
| I need to find out about…………. | NOTES |  |
| **Raising Indices to Indices** | **Indices:Multiplication Rule Extended: ExamSolutions**  <https://www.youtube.com/watch?v=zOMPyToUWE8>   * Read Booklet page 7 * Textbook pages 265 |  |
| I need to find out about…………. | NOTES |  |
| **The Zero Index** | * Read Booklet page 8 * Textbook pages 268 |  |
| I need to find out about…………. | NOTES |  |

Revision

Maths the Wacky Way INDICES <https://www.youtube.com/watch?v=qOn-NW_lsvE>

**OTHER PLACES TO READ**

* **The Power of the Flipped Classroom**

<http://www.youtube.com/watch?v=h0kqo2VIVM0>

* **Introducing the Flipped Classroom (Penguin video)**

<http://www.youtube.com/watch?v=iQWvc6qhTds>

* **The flipped classroom**

<http://campustechnology.com/Articles/2013/01/23/6-Expert-Tips-for-Flipping-the-Classroom.aspx?Page=5>

**1.** **Use existing technology to ease faculty and students into a flipped mindset**

**2. Be up front with your expectations…**It takes a great deal of positivity, and every day you need to discuss with your students why we're doing it this way and not the traditional way, what the benefits are, what they're getting out of this.

**3) Step aside and allow students to learn from each other.**

**4) Assess students' understanding of pre-class assignments to make the best use of class time.**

-quick quiz on the pre-class material at the beginning of class time.

- He also monitors students' understanding of course material via the web. "My students use discussion board software called [Piazza](https://piazza.com/) to post questions and comments as they're reading

5. Assessments that complement the mode

* **Thinkfinity**

<http://www.thinkfinity.org/thread/7780>

Expert

[**Jane Brown**](http://www.thinkfinity.org/people/jbrown) 19/05/2012 3:53 PM

Currently Being Moderated

Barbara De Santis posted a resource link to [Inside the Flipped Classroom -- THE Journal](http://www.thinkfinity.org/bookmarks/28476) and Amy Gordon started a discussion on [Re: The "Flipped Classroom" Model?](http://www.thinkfinity.org/message/48198#48198) In fact, if you search Thinkfinity Community for "flipped classroom" you will find 165 saved resources, indicating a global interest in this topic.

Multiple references indicate that in a flipped classroom

1. Students prepare for class by watching video, listening to podcasts, or reading articles that access their prior knowlege.
2. Students then reflect on their learning **and organize a list of questions regarding what is confusing them.**
3. **Students log in to a social site like a Thinkfinity Community group and post their questions to their teacher.**
4. The teacher reviews these questions and creates a lesson plan that addresses the areas of confusion but does not re-teach what the students already understand.
5. In class, the teacher poses questions or give problems and students work collaboratively in small groups to answer the questions or solve the problems.
6. The teacher mingles with student groups, listening to their conversations, and guides learning as appropriate until students understand.